

ASQC National President Berg UCC, South Charleston, Guest Here



Robert M. Berg

Robert M. Berg, assistant director, Research and Development Department of the Chemicals and Plastics Division of Union Carbide Corporation, is guest speaker for the ASQC meeting next week.

The Tennessee Chapter of the American Society for Quality Control meets next Thursday, September 28, at the Senator's Club, Knoxville. A social hour begins in the Emperor Room at 6:30 p.m.

Berg is a graduate of the University of Wisconsin where he received a BS degree in Electrical Engineering. He is a Senior Member of ASQC, and has served on the following committees: Professionalism, Nominating, Redistricting, Section Development, Convention, and Edwards Medal. He is currently serving as national president of the ASQC.

In 1961, Berg was elected an honorary member of the American Society for Testing and Materials Committee D-20; and also served on the ASTM Administrative Committee on Standards, the Materials and Testing Standards Board, and has served on the Board of Directors.

He will outline details of what the national ASQC does for an individual member.

Dinner charges for next week's meeting are \$3.50 and reservations may be made by calling Dan Dawson, extension 3-5991.

Distiller Expert Is ASME Guest Tomorrow

A. A. Lucchesi, Jack Daniel Distillery will describe the technical aspects of distilling at the Oak Ridge Subsection of the American Society of Mechanical Engineers' meeting tomorrow.

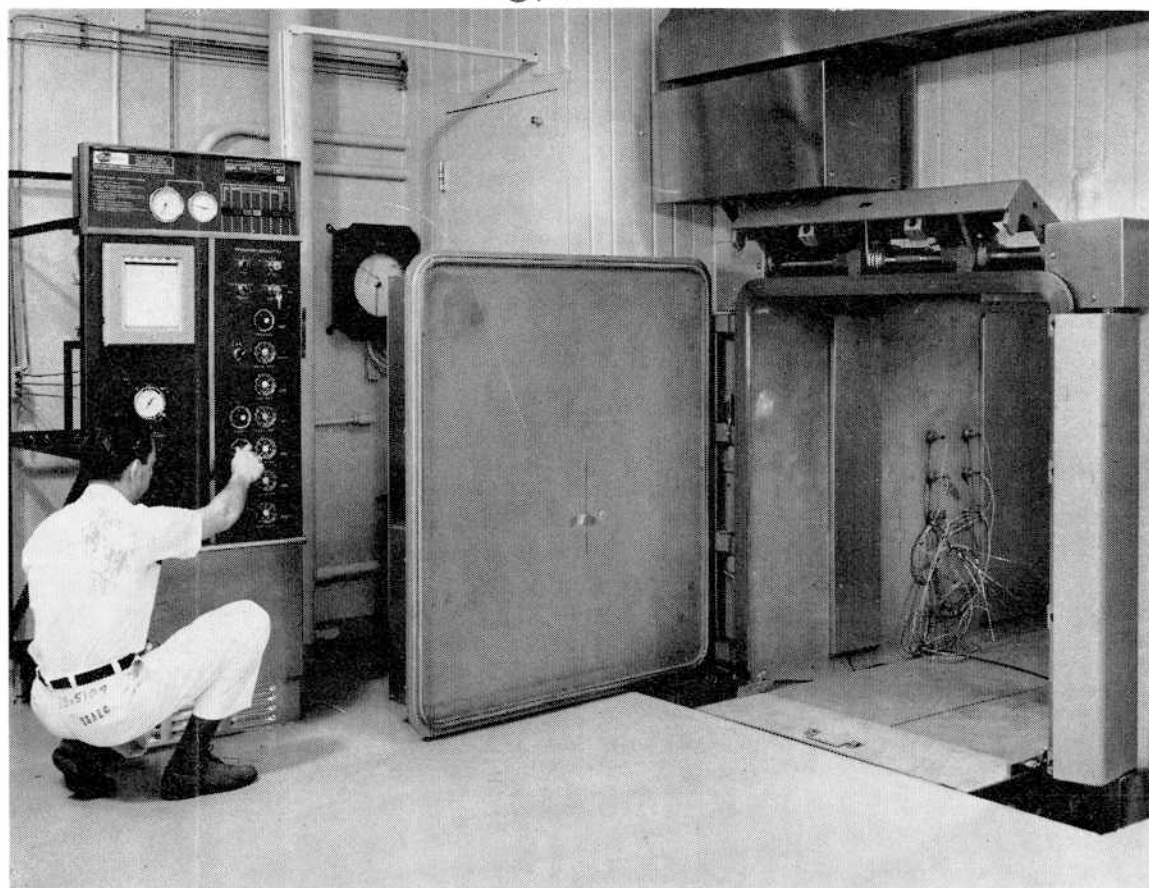
The meeting is set for Thursday, September 21, at the Elk's Club, on Arkansas Avenue, Oak Ridge. A social hour begins at 7 p.m.

Oxford's Bagguley Is Joint Seminar Guest

A joint Physics-Solid State Division seminar will be held Friday. D. M. S. Bagguley, University of Oxford, will discuss "Microwave Resonance in the Heavy Rare Earth Metals."

The seminar is set for Friday, September 22, at 3:15 p.m. in the East Auditorium of ORNL's 4500 building.

**ONE GIFT
WORKS
MANY
WONDERS**



A BULK STERILIZER equipped to control automatically pre-programmed cycles in high-vacuum, vacuum-pulse or gas sterilization has been installed in the Biology Division's animal facility. High vacuum sterilization has proved to be the most effective means of insuring sterilization in minimum time with difficult materials, such as animal bedding and food. Experiment Animal Facility supervisor J. R. Wells makes an adjustment at the control panel of the sterilizer.

'Clean Room' Facilities Completed For Animals In ORNL's Biology Division

A facility to house pathogen-free animals in a controlled environment has been completed at ORNL's Biology Division here in Y-12.

The barrier facility offers

maximum protection from infectious agents for the Specific Pathogen-Free animals (those free of known pathogenic viruses, bacteria and parasites.)

As an added precaution each cage within the barrier area will have a filter top. This has been effective in preventing certain infections in a conventional environment, and is expected to be an added line of defense within the barrier system.

Initial stock for the facility will be acquired by surgical procedure. Female mice which have reached the end of their pregnancy are surgically prepared, and the unborn young are removed by sterile procedure. The young are then placed with germ-free nurse mice whose new litters have been removed. Growth and replenishment of stock will then be produced by inbreeding.

Although production of animals on a small scale will begin in about a month, approximately two years will be required for breeding on a regular basis. After that, it is anticipated that 1,600-2,000 animals per week will be produced.

One of the prime responsibilities of Y-12 is support of Oak Ridge National Laboratory assignments. The plant's in-depth experience in environmental control and so-called 'clean-rooms' was utilized in the design and construction of the strictly controlled area just added in the Biology Division.

P. J. Breman and J. A. McKenzie, Environmental Control Engineering, worked extensively with the construction contractors in completing the facility. Y-12's

maintenance and utilities groups will also be utilized in the usual housekeeping and maintenance services to be required by the new facility.

A computer will be used to keep mouse breeding and inventory data up to date. The system will be programmed to keep accurate records and to generate useful information from basic data. It will maintain inventory, initiate breeding control, provide weaning and weighing lists, notify when to retire breeders, and record inbred lines which may be traced back from generation to generation.

Basically, there are five methods of entry into the barrier area of the building. One method is for personnel and four for materials and equipment.

Personnel may enter through a change and shower area. Materials and equipment enter through a positive transfer hood, bulk sterilizer, cage-and-bottle washer, and a chemical sterilization pass-through vat.

Continued on Page 4



THE UNITED FUND APPEAL throughout the three Union Carbide plants here will be held in October of this year. Shown, getting off to an early start, from left, are General Chairman H. F. McDuffie; R. F. Pruett, assistant chairman; and Barbara Lyon, publicity chairman. Organization in the plants is nearing completion, with goals established to meet the very real needs in the counties represented by the more than 12,000 employees who will be approached.

SAFETY SCOREBOARD

The Y-12 Plant Has
Operated
**33 Days Or
955,000 Man-Hours**
(Unofficial Estimate)
Through September 17
Without a Disabling
Injury
**Safety At Home
At Work, At Play**

The Bulletin

Published Weekly For The
Y-12 Employees Of
UNION CARBIDE
CORPORATION



NUCLEAR DIVISION

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Member



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Industrial
Editors' Association

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Y-12 Son Dies In Vietnam War

Y-12ers heard sad news last week. Harry L. Bradley, Research Services, was informed that his son Lance Corporal Joseph Keith Bradley, 20, had been killed in action September 6 in Vietnam.

Cpl. Bradley, a 1965 graduate of Oak Ridge High School, was a machine gunner in a weapons platoon.

The Bradley home is at 105 Vienna Road, Oak Ridge.

The Bradley family had heard from their son after a 16-day patrol where he wrote they "had been under mortar attacks consistently." He went on to thank his family for food packages, and told them "We may move again to the DMZ (Demilitarized Zone). You never know until it happens. Don't worry about me, I'm fine."

Besides his parents, the young Marine is survived by two brothers, Mike, in the U. S. Navy, stationed at Miramar, California, and Harry Lee Jr., Asheville, North Carolina. He is also survived by a grandmother, Mrs. James Reynolds, Asheville, North Carolina.

Cpl. Bradley entered the Marine Corps August 1, 1966, and had been in Southeast Asia since the first of the year. He had expected to return state-side around the first of next year. He attended the University of Tennessee and Lees-McRae College, Banner Elk, North Carolina, before entering service.

While adequate words of condolence fail us all, co-workers and friends in the plant are deeply touched.

Classified documents should not be left unattended.



LUCILLE PRUITT, General Can Fabrication Shop, is proudly boasting her little grand-son's photo, Lee M c W r i g h t Pruitt, born August 12, in Presbyterian Hospital. Lee is the son and grandson of two former Y-12ers — Leon (Sonny) Pruitt and the late Lee Pruitt.



DAMAGE BY THE OLIVER SPRINGS FLOOD back in July left the home of V. A. Mattox far away from its original footing. Water also climbed three feet inside the structure, damaging practically all the Mattox furnishings. The American Red Cross was promptly on the scene, with a gift of an electric range, a chest-of-drawers, two beds complete with box springs and mattresses. 6-13533

Local Flood Victims Get Needed Help

Direct help when it's needed. No strings attached . . . no expensive loans . . . no politics involved.

That was the word on the July 11 Oliver Springs tragedy, as the area suffered one of the wettest summers in history. But the wet summer just made you mow grass a little more, made your house smell musty, and maybe knocked you out of a golf match or two. Suppose you had lived in Oliver Springs?

It could have cost you your home. Many homes were damaged beyond repair in the flash flood which came roaring down Indian Creek on a Tuesday back in July. Not only homes, but many saw their household furnishings either washed away or damaged completely.

Such was the case of Vern Mattox . . . in Y-12's Buildings, Grounds and Maintenance Shops. His household belongings were completely under water . . . and the house was damaged extensively. The structure was moved from its foundation by the flooding creek, and water rose inside to damage almost all the furniture.

Furniture Provided

An electric range, a chest of drawers, two beds with mattresses and box springs were promptly replaced by the Disaster Office of the American Red Cross. (As a matter of fact, the Red Cross appropriated \$56,470.48 for the community on the western edge of Oak Ridge. This was direct, person-to-person help, in the form of building repairs, furniture and household possessions, medicine and nursing, food and clothing, etc. A special gift of \$2,500 came from the Red Cross Youth Fund to repair damages at the Oliver Springs High School.)

It isn't much, you might say. It is a lot if you ask the recipients. Just ask Vern Mattox.

And it's a lot when you consider that the Red Cross last year took little more than half of that here in the United Fund Drive for 1966!

Oliver Springs Official

Chester Spradlin, Chemical



V. A. MATTOX AND CHESTER SPRADLIN look over what emergency relief their community received during the July flood which took a heavy toll in homes in the Oliver Springs area. Mattox, in Y-12's Buildings, Grounds and Maintenance Shops, was himself the recipient of direct help, and Spradlin acting as an alderman in Oliver Springs, saw many more of his neighbors helped. Spradlin was marooned temporarily in the City Hall during the recent flood.

Services, who serves as an alderman in Oliver Springs was not inconvenienced by the flood as much as others. "But it was amazing to see the help that came," he stated. "I had always heard of the Red Cross, but had never seen them in action before."

Spradlin and Mattox both praised Red Cross disaster officials in the prompt manner in which they came to the rescue of the flood-stricken town.

Words of praise were also passed out for the Rescue Squads from some five surrounding counties who came in immediately to help . . . to local dairies who hauled water, free, into the town while the water supply was contaminated.

"We just never knew people cared that much," was one comment.

Chester was caught in the City

Hall when the high waters crested July 11. His car was inundated outside . . . not that he was going anywhere. He spent most of the night rescuing neighbors and friends from their flooded homes.

'Watch The Creek'

Mattox had cautioned his wife and daughters to watch the creek. "When it crosses the highway, we leave," he warned them. And, sure enough, on cue, they abandoned their home when it was apparent that the flood was going to reach them.

October 1 is just around the corner. That's when the Y-12 employee's United Fund will get its kick-off in the plant.

Like always, it seems we've got extra special reasons to give this year. Not only for all the worthwhile causes repressed in the United Fund, but for the special



Katy Kutkost
SEZ.

The summer vacations are over, and youth are back in school. So it's time we returned to our business as usual.

Today the average American family possesses the substance of what were only wistful dreams of by-gone kings. The living standards to be realized in the generation ahead will dwarf all that has gone before.

Many factors contributed to our material abundance, but one factor that is often overlooked is the effort of each individual at innovation and improvement on the many wonders of the modern world. They all save time and money.

The last cost reduction report points out how rewarding individual efforts can be. You all exceeded our goal of 701 actions by 19, and our goal of \$800,000 savings to the total of \$1,240,000.

CONGRATULATIONS TO ALL!

DPMA Meet Set At Deane Hill

"Education in Computer Science and Data Processing" will be the topic of a panel discussion at the September 26 meeting of Data Processing Management Association.

Participating in the program will be Dr. Gordon R. Sherman, director of the Computing Center at the University of Tennessee, moderator; Professor George Wagoner, head of the department of Business Education at U.T.; Professor Elias (Dick) Callihan, Chattanooga State Technical Institute; and Jim Buffler, director of Electronic Computer Programming Institute, Knoxville.

The meeting is set for next Tuesday, September 26, at Deane Hill Country Club. Management, supervision, educations and others interested in education in computer sciences and electronic data processing may make reservations to attend by contacting D. L. Morgan, extension 3-7102.

Engineering Technicians Charter Meeting Friday

The Oak Ridge - Knoxville Chapter of the American Society of Certified Engineering Technicians is holding a charter dinner meeting Friday, September 22, at 7 p.m. at the Oak Ridge Country Club.

Representative John J. Duncan will speak on "Professional Societies." Other prominent guests include C. E. Larson, president of the Nuclear Division of Union Carbide; Roger F. Hibbs, Y-12 Plant Superintendent; Robert G. Jordan, K-25 Superintendent; and A. K. Bissell, mayor of Oak Ridge.

Reservations may be made through B. H. Montgomery, extension 3-7028; T. A. King, 3-7635; or R. E. Jurko, 3-4334.

care agencies that come when help is needed.

Giving to the United Fund is like giving to anything. We can manufacture a thousand excuses why we shouldn't . . . but there's one great big reason **why we should give**. And that's the warm, human experience that comes when you know you've helped a fellowman!

There's almost no price tag on that!



THESE FOUR PRETTY LASSIES will be cheering the Oak Ridge Wildcats on this year as elected cheer-leaders. They are Jennifer Lund (John R.); Anne-Todd King (Campbell R.); Sharon Miller (Oscar L., Jr.); and Linda Blevins (Archie B.). The parent's name is in parenthesis.

Mixed Bowling Lead To 2 Teams

The Goofers and Hits & Misses share the top berth in Y-12's Mixed Bowling League, after last week's tilts. The Goofers trimmed three points away from the Mustangs, while the Hits & Misses took three from the Rollers. Other three point victories went to the Roses 'N Thorns over the Alley Cats, and the McSprays past the Twisters.

Bill Hackett, Roses 'N Thorns, topped single scores for men, posting a high 226 scratch game, 251 handicap game. His 543 scratch series was high also. Jim Thompson, Twisters, tore a 651 handicap series out of the record book.

The team highs went in four different directions . . . the Alley Cats rolled a 607 single scratch count . . . the Rollers posted a 777 handicap single total . . . the Hits & Misses amassed a 1776 scratch series . . . and the Roses 'N Thorns posted a 2264 handicap series.

Gwinn McLaughlin, McSprays, capped all women's honors . . . singles of 178 scratch, 223 handicap . . . series of 444 and 579.

Team	W	L
Hits & Misses	7	1
Goofers	7	1
Mustangs	5	3
Roses 'N Thorns	5	3
Rollers	3	5
McSprays	3	5
Alley Cats	1	7
Twisters	1	7

C Bowlers Hit Alley Last Week

Another Y-12 bowling league hit the lanes Monday, September 11, as the 12-team C League made its debut. Two teams took roaring four-point wins as the Rollmasters rolled over the Fireballs and the Royal Flush called the hand of the Rodders.

For three points it was the Big Five beyond the Invalids, the Hi-Lifers over the King Pins, the Sunflowers sailing past the Badgers and the Parbustlers past the Rounders.

W. R. McGill, Rounders, hit an early stride, rolling singles of 231 scratch and 257 handicap. Bill Sise, Big Five, put a 602 scratch, 668 handicap series on the records.

The Rounders rolled high singles of 916 scratch, 1032 handicap . . . while the Big Five scored high series . . . 2476 scratch, 2924 handicap.

League standings follow:

Team	W	L
Rollmasters	4	0
Royal Flush	4	0
Big Five	3	1
HiLifers	3	1
Sunflowers	3	1
Parbustlers	3	1
Invalids	1	3
Badgers	1	3
King Pins	1	3
Rounders	1	3
Fireballs	0	4
Rodders	0	4

Security is your responsibility.

Dorr 1-Over-Par In Final Contest

Early morning fog delayed Saturday's big golf match at Southwest Point, Kingston, as 148 Y-12 duffers hit the greens.

Carl Dorr came up with a 73 to win the big match, the last of the summer. Dorr was followed in scratch scoring by D. E. Littleton, 75; J. A. Griffin and Bill Lanter, 76, and C. M. Cheek, 79.

Handicap lows were turned in by H. D. Cofer, 66; Bob Roe, 68; Ed Sise, 70 . . . and Ernie Collins, 72.

Mac Wright eagled number 15 hole, taking 14 pars. Bob Hagwood scored 13.

SECOND FLIGHT

Co-Op Rodney Dobbs took the second flight, scoring a hot 77. He was followed in scratch scores by L. C. Watson and Hugh Beeson, 83; John Holly, with 86.

Handicap lows were earned by Carl Selvidge, 70; Joel Garber, 71; J. D. Shelton, 72 . . . and Ray Riggs, 73.

Howard Nobles chalked up 10 pars . . . Bill Butterini, eight.

THIRD FLIGHT

Mont Kendrick shot an 87 in the third flight, along with Carl V. Redding. They were trailed by John Perry, 89; W. T. Chapman, 92; and E. V. Hawk, 93.

Handicap lows were taken by Bud Thorp, 70; J. T. Parker and Roy Huddleston, 71; and E. W. Smith and W. L. Seavers, each with 75.

FOURTH FLIGHT

J. S. Arrington Jr. topped golfers in the last division, scoring a 91. He was followed by R. L. Ludwig and J. W. Halsey, each with 98. J. T. Wylam fired a 102.

Handicap lows went to Dave Hendrickson and Ray Ellis, each with 72; B. D. McElroy and Fred Marshall, 76.

Charlie Neimeier and Fred Wetzel each scored five pars.

Braves Lose Number Three In Play-Off

Well, the Braves just didn't cut it.

In a play-off between Y-12 Softballers and the champs in the ORNL League the Y-12 team got a little worse with each game.

Final action came Monday, September 11.

The Red Devils, big champs from across the hill, romped over the Y-12 team in the third game 13 to 2, winning all three of the first games of the best-of-five series.

Tom Coffey, Charlie Dunn, Hollis Stakes, and Jim Heiskell poled long homeruns as the Devils drove in 13 runs from 17 hits.

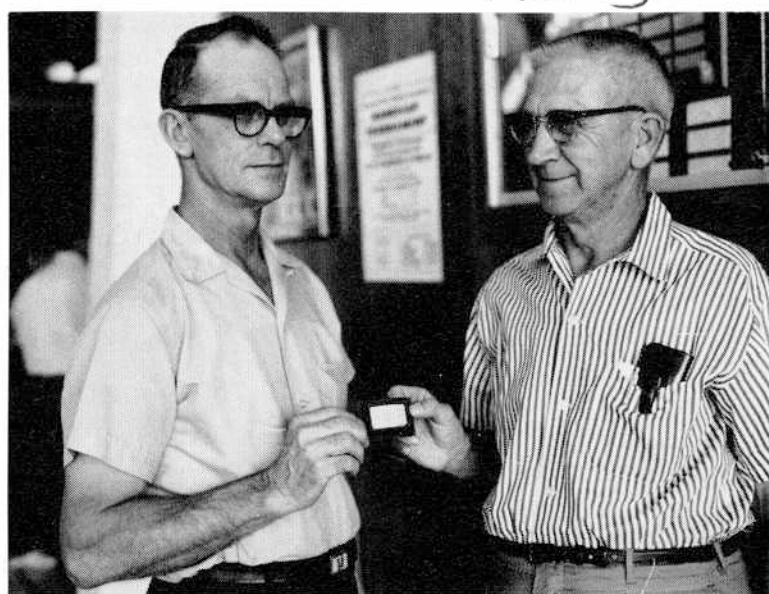
The Braves scored their two runs in the third and final innings. The Red Devils collected four in innings one and five . . . with three in the big third inning also.

Softballers, come again!

Coley-Raper Still Hold Horseshoe Slim Lead

The Durham-Harness team in the Horseshoe League dumped the Helms-Lucke pair for eight points last week . . . and the Coley-Raper team took five from Gray-Leonard. The Matheny-Miller duo posted five also against Rein-Case . . . while the Hutto-Tillery team took a forfeit win from Kendig-Zupan.

Team	W	L
Coley-Raper, Y-12	34	11
Durham-Harness, ORNL	30	6
Luckett-Barger, ORNL	28	8
Gray-Leonard, ORNL	22	23
Matheny-Miller, ORNL	20	16
Rein-Case, ORNL	18	18
Helms-Lucke, Y-12	17	19
Hutto-Tillery, ORNL	11	34
Kendig-Y-12, Zupan-ORNL	0	45



THE CLASSIC LEAGUE STARTED ROLLING on a pleasant note recently, as Robert Hopper, left, received a belt buckle as the most-improved bowler in last year's play. Hopper improved his bowling average by 11 pins during the season, and receives the A.B.C. buckle from Roy Roberts, league secretary.

Rippers, Bumpers In Classic Lead

Two teams occupy familiar roles as leaders in the Classic League, as the Rippers and Has Beens stand up there. They both took sweep-wins last week . . . the Rippers roaring past the Markers, and the Has Beens beating the Playboys. The Bumpers also moved up with a big win over the Eagles. Other big wins went to the Eightballs over the Splinters, the Tigers past the Screwballs.

Three point wins went to the Rebels round the Cubs, the Pinbustlers past the Smelters and the Swingsters superior to the All Stars.

Jay Holzknicht, Rippers, ripped out a 236 single game, pushed to a 250 handicap single. His 627 scratch series was high . . . and John Towle, Eightballs, edged out a 690 handicap series.

The Has Beens had high singles 946 scratch, 1070 handicap . . . and series honors were shared . . . the Bumpers in scratch count 2617, the Eightballs on the handicap side 2967.

League standings follow:

Team	W	L
Rippers	7	1
Has Beens	7	1
Bumpers	6½	1½
Rebels	6	2
Pinbustlers	6	2
Smelters	5	3
Eightballs	5	3
Markers	4	4
Playboys	4	4
Swingsters	4	4
Tigers	4	4
Cubs	2½	5½
All Stars	2	6
Splinters	1	7
Screwballs	0	8
Eagles	0	8

Recreation



Monday, September 25

BOWLING: 5:45 p.m. C League, Ark Lanes.

GOLF: Melton Hill Course, immediately after work.

TENNIS: League play as per schedule, to be arranged by players.

Tuesday, September 26

GOLF: Melton Hill Course, immediately after work.

Wednesday, September 27

CARBIDE RIFLE LEAGUE: 7 p.m. Clinton Rifle Range.

BOWLING: Mixed League, 8 p.m. Ark Lanes.

Thursday, September 28

BOWLING: Classic League, 5:45 p.m. Ark Lanes.

HORSESHOE LEAGUE: 7 p.m. City Courts, Jackson Square.

Winstead-Ferguson Lead Melton Duffers

The Winstead-Ferguson duo moved out into front place in the Melton Hill Golf League last week, due to a five point win over Hogg-Huffman. Taking six it was Garber-Huddleston over Roberts (soloing for Roberts-Arnold), Alvey-Gamble over Dill-Hopwood.

Four point wins went to Rogers-Watson over Hamby-Braden, J. Grubb-Cofer over Gresham-Brown, and H. Butler-Wright over Nobles-Redding.

Sharing three it was Nelson-Tiller and Bryant (alone for the Bryant-Henderson pair.)

Two of the set matches were drawn in forfeits.

Low scratch cards were returned by Newt Hamby, 40; Wright and Cofer 41, Braden, Brown and Watson . . . 42. Handicap card lows went to Watson, 35; Winstead, 36; Cofer and Hamby 37.

Team	W	L
Winstead-Ferguson	28	8
Gresham-Brown	25	11
Nelson-Tiller	25	11
Rogers-Watson	25	11
Garber-Huddleston	24	12
J. Grubb-Cofer	23	13
H. Butler-Wright	21	15
Hogg-Huffman	20	16
Hamby-Braden	17	19
McGinnis-Goodwin	16	20
Boyd-Sise	16	20
Perry-Butler	16	20
Arnold-Roberts	15	21
Alvey-Gamble	13	23
Morehead-Poly	13	23
Bryant-Henderson	11	25
Nobles-Redding	10	26
Dill-Hopwood	6	30



Ride wanted or will join car pool from West Outer Drive, Oak Ridge, to Bear Creek Portal, straight day. Wayne Oaks, plant phone 3-7397, home phone Oak Ridge 483-1065.

Will join car pool from Norwood area, Knoxville, to Central Portal, straight day. Gene Keith, plant phone 3-5606, home phone Knoxville 689-2229.

Two riders wanted from Delaware, East Village section, to North or Central Portal, straight day. Roy Roberts, plant phone 3-7565, home phone Oak Ridge 483-1207.

Ride wanted from Monticello Apartments, near Atomic Museum, to East Portal, straight day. Mildred Earhart, plant phone 3-5471.

It is always time for security.



MR. AND MRS. JAMES A PUFFER, and daughter Angela Dawn, recently visited Mrs. Puffer's parents, Mr. and Mrs. O. B. Harness, Unaka Street, Clinton. En route from Rome, Georgia to Dallas, Texas, they will become Lone Star Staters as Jim reports to the Texas Instruments Co. Elizabeth's father and the proud grandfather of Angela is in Y-12's Buildings, Grounds and Maintenance Shops.



UNION CARBIDE CORPORATION
NUCLEAR DIVISION
P. O. BOX Y, OAK RIDGE, TENNESSEE 37830

(RETURN REQUESTED)

BULK RATE
U.S. Postage
PAID
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Permit No. 71



'Heap high the farmer's wintry hoard! Heap high the golden corn. No richer gift has Autumn poured . . . From out her lavish horn!' The golden time of the year welcomes more Y-12ers into status groups with Union Carbide Corporation. Congratulations.

20 YEARS

Thomas A. Burkett, Dispatching Department, September 24.

15 YEARS

Charles F. Robinette, Process Maintenance, September 23.

Lonnie H. Davis, Buildings, Grounds and Maintenance Shops, September 24.

Elmer C. Hatmaker, Research Services, September 24.

James P. McMillin, Radiation Safety, September 24.

John H. McNelly, Dispatching Department, September 24.

Glenn Slack, Dispatching Department, September 24.

10 YEARS

Charles E. Dial, Machine Maintenance, September 23.

Douglas L. Frazier, Quality Assurance Inspection, September 23.

Carl D. Lawson, Dimensional Inspection, September 23.

Donald Neely, H-2 and F-Area Shops, September 23.

Robert D. Scaff, H-2 and F-Area Shops, September 23.

Art D. Schulte, Dimensional Inspection, September 23.

Noted Geneticist Is HPS Speaker

ORNL 39764



Dr. William L. Russell

Dr. William L. Russell, world famous research geneticist at Oak Ridge National Laboratory, will be guest speaker for the September meeting of the East Tennessee Chapter of the Health Physics Society. The meeting is set for Monday, September 25, at the Oak Ridge Country Club.

Dr. Russell is a native of England and received his BA at Oxford University in 1932. He came to this country shortly thereafter and received his PhD in mammalian genetics from the University of Chicago. In 1947, he married his well known collaborator in genetics, Dr. Liane B. Russell.

Dr. Russell is the author of more than 80 published papers in genetics and related fields, and has been an advisor in radiation genetics to the United Nations and other organizations. He has held many offices in the Genetics Society of America, including the presidency in 1965.

The program for the September meeting of the HPS will begin at 5:30 p.m. with a social hour and dinner preceding the technical session. Dr. Russell's address is entitled "Recent Genetics Research and Relation of Results to Hazard Evaluation." He will be

for paging the entire facility. There are also three automatic two-way intercom systems for communication between the barrier area and other areas of the animal facility. The third system is a combination paging and telephone type of intercommunication system which serves the animal area of the facility and one remote station in another building.

Specialized equipment in the new facility will include a positive air transfer hood which will allow animals to be routinely passed from one area of the building to another. This will decrease personnel traffic into the barrier area.

High Vacuum Sterilization

A bulk sterilizer equipped to control automatically pre-programmed cycles in high-vacuum, vacuum-pulse or gas sterilization has been installed. High vacuum sterilization has proved to be the most positive means of insuring sterilization in minimum time, with difficult materials such as animal bedding and food.

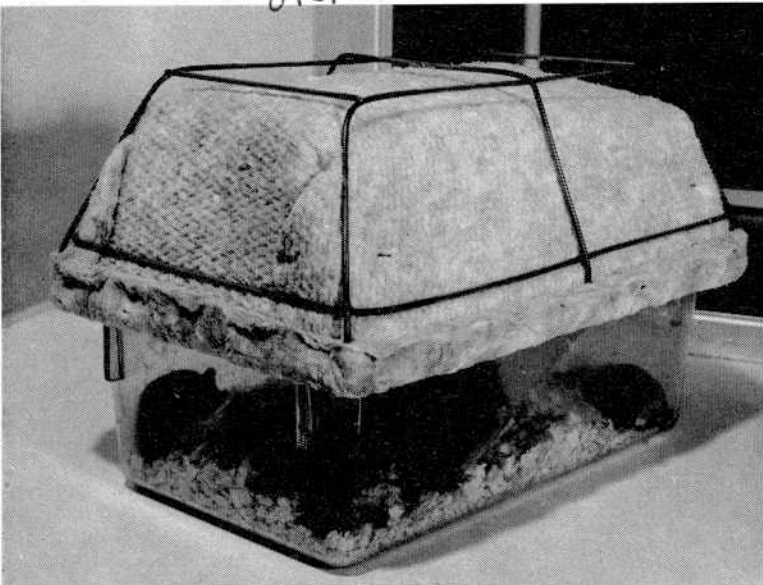
Also installed in the facility is a combination cage- and -bottle washer which is capable of washing, rinsing and drying 540 cages or 2,500 bottles per hour.

A chemical sterilization pass-through vat containing an aqueous sterilization solution was installed between the surgical area and the barrier. The vat will allow animals in utero to be passed from the surgical area, through the solution, to the barrier.

Biology Division's M. L. Simmons will be in charge of the facility's programs.

"A man without one scar to show on his skin, that is smooth and sleek with ease and home-keeping habits, will undertake to define the office and duties of a general." —Plutarch.

Security is always in season.



FILTER TOP CAGING, which has proved effective in preventing certain infections from occurring in a conventional environment, is expected to be an added line of defense within the barrier system of ORNL's Biology Division. The new structure will house Specific Pathogen-Free animals . . . those free from known pathogenic viruses, bacteria and parasites.

'Clean Room'

Continued from Page 1
Seven Animal Rooms

The facility contains seven animal rooms inside the barrier area. Each room accommodates 400 animal cages and is supplied with a sufficient volume of air to provide a minimum of 15 changes per hour. Air is introduced into the top of the cell via a continuous slot-type diffuser running the entire length of the room. The resulting flow pattern does not cause excessive drafts. Air is exhausted from the floor level and conducted via duct-work to the wash area.

Unique services and construction details include flush-mounted electrical receptacles with water-tight covers, and vapor-tight lighting fixtures in animal rooms. This permits spraying and rinsing of walls and ceilings for frequent cleaning and decontamination.

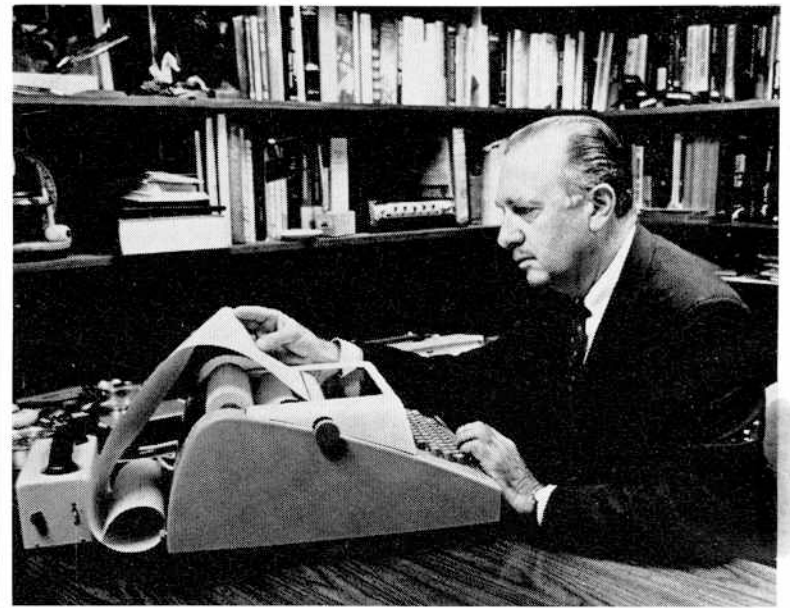
To prevent the entry of any contaminated air into the barrier area through the conduit system, sealing condulets were installed in all electrical conduit lines entering the facility from the outside. To prevent air flow between certain areas, caulking compound composed of a polysulfide base sealant was used throughout the facility.

Automatic Air Locks

Two air locks, located at the north end of the facility, are arranged in such a manner that the first door will close automatically before the second door can be opened.

An alarm thermostat located in each of the animal rooms and a humidistat, with a sensing element located in the exhaust duct from the animal room, actuate alarms at a central utility monitoring center when either the temperature or humidity vary beyond preset limits.

The facility has three types of communication systems. These include a public address system



A COMPUTER IN EVERY HOUSEHOLD? Computers may be as common as telephones by the 21st century. CBS News Correspondent Walter Cronkite is seen with a portable computer terminal in his office while preparing for the "21st Century" two-part report on "The Computer Revolution" to be seen Sunday, September 24, at 6 p.m., EDT, over WBIR-TV, Channel 10. The terminal reaches the computers at the Manhattan Information Processing Center of General Electric via a standard desk telephone. The system enables 40 users to share the same computer at one time.

'The Computer Revolution' To Be Seen On '21st Century' Sunday, September 24

Nuclear energy extended man's muscle power. The computer promises to extend his already immense brain power. This achievement and its profound meaning will be explored in "The 21st Century" two-part report on "The Computer Revolution" starting Sunday, September 24 at 6 p.m., EDT, over WBIR-TV, Channel 10. Walter Cronkite is principal reporter for the series, sponsored in the public interest by Union Carbide Corporation.

The impact of the computer revolution is being felt throughout the world today. New York could not handle its daily load of air traffic without the computer banks at the New York Air Traffic Control Center. At the center computers are seen regulating traffic for one of the world's busiest airport complexes — Kennedy International and La Guardia on Long Island, and Newark, New Jersey. Arrival or departure of one airliner every 21 seconds involves billions of numbers and split-second calculations already too complex for the human mind.

Added action highlights of the report include operations of a computerized steel mill where a red hot slab of 12 inch thick steel is converted into a shimmering, paper-thin ribbon a quarter mile long.

Computers monitor patient care from arrival to departure at the Monmouth Medical Center in New Jersey; and study and diagnose electro-cardiograms, electronic records of heart activity; at Mt. Sinai Hospital in New York City, demonstrating their future use in medicine.

Ten thousand characters per second are printed by the Linotron, a new computerized typesetting machine developed jointly by CBS Laboratories and Mergenthaler Linotype Company.

The promise of a computer in the home and the office is demonstrated at IBM's Philadelphia, Pennsylvania, computer center. Here, 50 firms, individuals and schools use one computer via telephone connections. Applications range from the complex problem of where to locate a

introduced by Dr. C. S. Shoup, of Oak Ridge Associated Universities.

community antenna to helping youngsters study geometry.

The second report, on October 1, examines man's future relationship with the computer in what may become known as the "age of the computer."

Playhouse Plans Anniversary Fete

The Oak Ridge Playhouse Silver Anniversary Dinner Dance is set next Friday, September 29, at the Oak Ridge Country Club. The buffet dinner will be served from 7:30 until 9 p.m.

Music by Tony Musco and Orchestra begins at 9 and will last until 1 a.m. Intermission entertainment (?) for the dance will be provided by Ruth Carey, Norwood Gove, Dick Smyser and Eugene Eichler. The theme of the skit is "A Funny Thing Happened on the Way to Opening Night."

Reservations chairmen are Mrs. Melvin Sturm and Mrs. J. T. Gillespie. Those not planning to attend the dinner may obtain dance reservations only.



ISADORE SHARPER, Maintenance Division, proudly shows off his great-grandson! The little fellow, Reginald Isadore Sharper, recently visited his great grand-parents in Oak Ridge. He lives with his parents at Ft. Campbell, Kentucky, where his dad is stationed with the famed 101st Airborne Division.